

LETTING FIREDRILLS PUT THEMSELVES OUT ON THE WEB WITH SAS® SOFTWARE

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Abstract

In spite of gathering requirements and developing many production reports, developers are often asked to drop everything in order to produce an ad hoc report for upper management. The continuing occurrence of these requests causes the developers to become extremely frustrated, especially if the time lines on current projects are still expected to be met. A tool that can help solve this problem is an ad hoc query tool on the Web. With the requirement by U S WEST users that applications be on the company's intranet, SAS/INTRNET is used to develop a tool that will allow many of these requests to be accomplished by the users themselves. In order for the tool to be successful, well thought-out data marts must be in place. The data marts must not only contain detail data sets, but summarized data sets that are grouped by all possible categories and combinations of categories. Date variables are also designated so that they can be used for the timeframes that the users want. This information is stored in SAS data sets that are used by the tool to let the user generate the report. Each report has the capability to download the data directly to EXCEL on the desktop, thus allowing the fire-drill to be handled without taking valuable time from the developers.

Introduction

The easy availability of information on U S WEST's intranet as described in Lindeman, Julie, Romero, Bob and Tavel, Heather "Putting Executive Scorecards on the Web with SAS Software", Proceedings of the Twenty Fourth Annual SAS Users Group International Conference, 244, 1420-1424, has led to a flood of requests by data-starved users. Ad hoc requests for groupings other than those specified in the executive scorecards are now commonly requested as well as for various timeframes of the data based on different date variables. With each request being a high priority that was due yesterday, developers have to drop current projects in order to meet these demands. In order to free the developers from most of the fire-drills that are constantly requested, an ad-hoc query tool on the Web was developed. The SAS/INTRNET tool on the company's intranet is a series of frames that uses the meta data of each data mart to prompt the user for the parameters necessary to generate the report. The establishment of the data mart and its meta data are the key factors in the success of the Web query tool.

Establishing the Data Marts

The SAS system has provided an end to end solution for decision support at U S WEST which contributed to significant performance improvements. See Romero, Bob and Hamilton, Dale "SAS Powers Web Measurement Solution at U S WEST", Proceedings of the Twenty Third Annual SAS Users Group International Conference, 23, 1450-1454. Data is extracted from ORACLE® tables using SAS/ACCESS® and the UNIX "cron" facility on an hourly or daily basis. Complex business rules are applied to the data using the data step and then summarized at different geographical and time-based levels.

A LIBREF is established for each data mart. Each data mart contains a detailed data set and summarized data sets. Category variables are used to stratify the data. The date variables are identified to determine the stratification by time (i.e. year, month, week, day) or the timeframe of the data. The variables in the data set are available to set criteria up for the query.

The report is generated on the web with the ability to download the data to EXCEL on the user's desktop.

Screen Flow

A series of frames is set up to generate the query. The first frame contains a list of descriptions of the data marts that are available. After the user chooses a data mart, a list of descriptions of the data sets in the data mart appear in a box. When a data is chosen, the list category variables appear if stratification is needed. A list of date variables is available to summarize the data by year, month, week, or day. These date variables are available to be selected to pick the time frame desired with the start and end dates. Criteria can also be used to subset the data. A list of column names and a list of operators are used with values given by the user. Boolean operators are used if additional criteria are needed. After the user clicks on the button to generate the report, the data is displayed on the screen with the optional button to download the data into EXCEL on their desktop.

CONCLUSION

The key to reducing the number of ad hoc requests to developers by users was the well planned design and development of the data marts. Continuous time savings are realized by the developers by providing this tool to the users. The users also have the data they want in the format that they are most familiar with which are EXCEL spreadsheets. The authors are in the process of getting permission from U S WEST to reproduce the screens demonstrating the use of the tool. These screens are on the poster and will be available as handouts at SUGI or can be obtained from the authors using the contact information.

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